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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/549,353

09/14/2005

Hyeon-Yong Jang

YOM-0188

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23413 7590 01/03/2007
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EXAMINER

ALEMU, EPHREM

ART UNIT

PAPER NUMBER

2821

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

01/03/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/549,353

Applicant(s)

JANG, HYEON-YONG

Examiner

Ephrem Alemu

Art Unit

2821

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9 and 10 is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☒ Claim(s) 6-8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>9/14/2005 & 5/22/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Canova (EP 0752805 submitted by applicant).

Re claim 1, Canova discloses an apparatus of driving a light source for a display device, the apparatus comprising:

an inverter (i.e., including active power elements 9, 11) applying a voltage to the light source ((L) to be turned on or off (Figs. 1, 3; Col. 1, lines 23-37; Col. 5, lines 18-22);

a temperature sensor (i.e., thermal protection circuit 51) sensing a temperature and generating a first signal based on the sensed temperature (Figs. 1, 3; Col. 4, lines 12-17; Col. 5, lines 23-57); and an inverter controller (i.e., control transformer 27, 29, 31) controlling the inverter (i.e., including active power elements 9, 11) depending on the first signal of the temperature sensor (Figs. 1, 3; Col. 4, lines 12-49; Col. 5, line 23-Col. 6, line 51).

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Re claims 2-3, Canova further discloses the temperature sensor (i.e., thermal protection circuit 51) comprises a thermistor (i.e., temperature variable resistor 63) having a resistance varying depending on the sensed temperature and a resistor connected to the thermistor (i.e., temperature variable resistor 63) and the resistor (61, 65) functions as a voltage divider along with the thermistor (i.e., temperature variable resistor 63) (Figs. 3, 4; Col. 5, line 43- Col. 6, line 51).

Re claims 4 and 5, Canova further discloses a buffer (i.e., thermal hysteresis block 57) generating a second signal based on the first signal from the temperature sensor and providing the second signal for the inverter controller; wherein the buffer (i.e., thermal hysteresis block 57) has a hysteresis characteristic (Fig. 4; Col. 5, line 43- Col. 6, line 51).

Allowable Subject Matter

4. Claims 9 and 10 are allowed.
5. Claims 6-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
6. The following is a statement of reasons for the indication of allowable subject matter:
The prior art of record fail to teach or suggest, alone or in combination, the following limitations:
“wherein the inverter controller comprises an oscillator generating an oscillating signal having a frequency varying depending on the second signal from the buffer” as claimed in claim 6 and “generating a second signal on the basis of the first signal; generating a third signal having a frequency depending on the states of the second signal; applying

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a voltage to the light source; and changing the voltage applied to the light source responsive to the frequency of the third signal" as claimed in claim 9.

Claims 7 and 8 are objected as being directly or indirectly dependent on objected claim 6.

Claim 10 is allowed as being dependent over allowed claim 9.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Suzuki (US Pub. 2003/0173910); teaches similar inventive subject matter.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ephrem Alemu whose telephone number is (571) 272-1818. The examiner can normally be reached on M-F 9:00 AM to 5:30 PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P Callahan can be reached on (571) 272-1740. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

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like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EA
12-26-06


PRIMARY EXAMINER